

# United States Patent [19]

Gilbert et al.

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[54] RECOMBINANT DNA MOLECULE

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435/231; 935/48; 536/27  
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536/27; 935/10, 14, 47, 48

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(List continued on next page.)

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[57] ABSTRACT

A plasmid or phage gene for a periplasmic or extracellular bacterial protein is cleaved, a double-stranded DNA sequence coding for a selected protein or portion thereof from a eukaryotic cell such as insulin is inserted in that cleaved gene by recombinant DNA techniques and used to transform a bacterium, and the excreted selected protein is collected.

4 Claims, 3 Drawing Figures